

## DECLARATION FOR PATENT APPLICATION

Docket Number (optional) E1047/20006

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SOLUTION HYBRIDIZATION OF NUCLEIC ACIDS WITH ANTISENSE PROBES HAVING MODIFIED BACKBONES  
the specification of which is attached hereto unless the following box is checked:

Was filed on \_\_\_\_\_ as United States Application Number or PCT International Application

☐ Number \_\_\_\_\_ and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56. I hereby claim foreign priority benefits under 35 U.S.C. §119 (a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365 (a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

None ☐  
(Number) \_\_\_\_\_ (Country) \_\_\_\_\_ (Day/Month/Year Filed) \_\_\_\_\_

None ☐  
(Number) \_\_\_\_\_ (Country) \_\_\_\_\_ (Day/Month/Year Filed) \_\_\_\_\_

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

None  
(Application Number) \_\_\_\_\_ (Filing Date) \_\_\_\_\_

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

08/807,901 February 27, 1997 Pending  
(Application Number) (Filing Date) (Status-patented, pending, abandoned)

08/870,370 June 6, 1997 Pending  
(Application Number) (Filing Date) (Status-patented, pending, abandoned)

08/886,280 July 3, 1997 Pending  
(Application Number) (Filing Date) (Status-patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Alan H. Bernstein (Registration No. 19,315); Stanley H. Cohen (Registration No. 20,235); Manny D. Pokotilow (Registration No. 22,492); Barry A. Stein (Registration No. 25,257); Martin L. Faigus (Registration No. 24,364); Eric S. Marzluf (Registration No. 27,454); Robert S. Silver (Registration No. 35,681); Scott M. Slomowitz (Registration No. 39,032); Michael J. Berkowitz (Registration No. 39,607) and David M. Tener (Registration No. 37,054) care of Caesar, Rivise, Bernstein, Cohen & Pokotilow, Ltd., 12th Floor, Seven Penn Center, 1635 Market Street, Philadelphia, Pennsylvania 19103-2212, my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor (given name, family name) Yuan Min Wu

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence Thornhill, Ontario, Canada Citizenship People's Republic of China

Post Office Address 4 Dalmeny Road, Thornhill, Ontario, Canada, L3T 1L9

Full name of second joint inventor, if any (given name, family name) Eileen Xiao-Feng Nie

Second Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence Thornhill, Ontario, Canada Citizenship People's Republic of China

Post Office Address 4 Dalmeny Road, Thornhill, Ontario, Canada, L3T 1L9

☐ Additional inventors are being named on separately numbered sheets attached hereto.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Yuan Min Wu and Eileen Xiao-Feng Nie

For: **SOLUTION HYBRIDIZATION OF NUCLEIC ACIDS WITH ANTISENSE PROBES  
HAVING MODIFIED BACKBONES**

The specification of which is attached hereto.

**STATEMENT OF FACTS IN SUPPORT OF FILING  
ON BEHALF OF NONSIGNING INVENTORS (37 C.F.R. 1.47)**

This statement is made as to the exact facts that are relied upon to establish the diligent effort made to secure the execution of the declaration by the nonsigning inventors for the above-identified patent application before deposit thereof in the Patent and Trademark Office.

Because signing on behalf of the nonsigning inventor is by a person or entity showing a sufficient proprietary interest, this statement also recites facts as to why this action was necessary to preserve the rights of the parties or to prevent irreparable damage.

This statement is being made by the available person having first-hand knowledge of the facts recited therein.

**IDENTIFICATION OF PERSON MAKING THIS STATEMENT OF FACTS**

Glen Erikson  
Vice President, Lorne Park Research Inc.  
Box 101, Suite 2018  
20 Queen Street West  
Toronto, M5H 3R3 Canada

**LAST KNOWN ADDRESS OF THE NONSIGNING INVENTORS**

Eileen Xiao-Feng Nie  
4 Dalmeny Road  
Thornhill, M5H 3R3 Canada

Yuan Min Wu  
4 Dalmeny Road  
Thornhill, M5H 3R3 Canada

**ADDED PAGES TO COMBINED DECLARATION  
AND POWER OF ATTORNEY FOR SIGNATURE BY PERSON  
WITH SUFFICIENT PROPRIETARY INTEREST ON BEHALF OF NONSIGNING  
INVENTOR(S) WHO REFUSE(S) TO SIGN OR CANNOT BE REACHED  
(37 CFR 1.47(b))**

I, Glen Erikson, hereby declare that:

I. I am a citizen of Canada, and have a post office address of Box 101, Suite 2018, 20 Queen Street West, Toronto, M5H 3R3 Canada.

II. I am authorized by the following person or juristic entity with sufficient proprietary interest:

Lorne Park Research Inc.

Name of assignee or entity having sufficient proprietary interest

Box 101, Suite 2018, 20 Queen Street West, Toronto, M5H 3R3 Canada

Address of assignee or entity having sufficient proprietary interest

Vice President

Title of person executing this declaration and authorized to sign on behalf of assignee or entity having sufficient proprietary interest

III. By virtue of this proprietary interest, I sign this declaration on behalf of, and as agent for the inventors Yuan Min Wu and Eileen Xiao-Feng Nie, each of whom refuses to sign. Yuan Min Wu and Eileen Xiao-Feng Nie are both citizens of the People's Republic of China, last known to reside at 4 Dalmeny Road, Thornhill, M5H 3R3 Canada.

IV. Upon information and belief, I aver those facts that the inventor is required to state. 37 CFR 1.64(b).

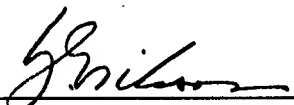
V. Accompanying this declaration is:

- (1) A STATEMENT OF FACTS IN SUPPORT OF FILING ON BEHALF OF NONSIGNING INVENTOR,
- (2) A STATEMENT ESTABLISHING PROPRIETARY INTEREST BY PERSON SIGNING ON BEHALF OF NONSIGNING INVENTOR ,

to establish the proof of pertinent facts, and to show that such action is necessary to preserve the rights of the parties or to prevent irreparable damage, and

- (3) THE PETITION FEE OF \$130.00 (37 C.F.R. 1.17(i)).

Date: 20 May, 1998

  
\_\_\_\_\_  
Glen Erikson, Vice President  
Lorne Park Research Inc.

**DETAILS OF REFUSAL OF NONSIGNING INVENTOR  
TO SIGN APPLICATION PAPERS**

The complete application (as attached, including the specification, claims and drawings), a Declaration/Power of Attorney and an Assignment to Lorne Park Research Inc. were personally presented to Eileen Xiao-Feng Nie and Yuan Min Wu by the undersigned at a meeting in the office of Lorne Park Research Inc. at 20 Queen Street West, Toronto, Canada, on May 5, 1998. Drs. Nie and Wu both orally refused to sign the application papers on the orally stated grounds that they believed that the application was incomplete and that they needed to perform additional experiments to generate further and better examples to be added to the application.

Their refusal occurred despite being instructed to sign the application papers by the undersigned, their employment supervisor at Lorne Park Research Inc., and despite the fact that they had previously reviewed earlier drafts of the application and their previously proposed revisions had been incorporated into the final draft of the application.

Their refusal to sign the application papers occurred toward the end of a period in which Drs. Nie and Wu had been unsuccessfully demanding from the undersigned a greater equity stake in Lorne Park Research Inc. as compensation for their productivity as employees of Lorne Park Research Inc.

**PROOF OF NEED TO PREVENT IRREPARABLE DAMAGE  
OR PRESERVE THE RIGHTS OF THE PARTIES**

MPEP § 409.03(g) provides that "[i]rreparable damage may be established by showing that a filing date is necessary to . . . make a claim for priority [under] 35 U.S.C. 119, 120, and 121 [and identifying] the prior application or applications."

This application claims priority from U.S. Patent Applications Nos. 08/807,901, 08/870,370 and 08/886,280 under 35 U.S.C. § 120. The statute provides that priority can be claimed if the application claiming priority is "filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application." Thus, a filing date for this application is necessary to claim priority under 35 U.S.C. § 120 from the parent applications prior to their patenting or abandonment, or termination of proceedings on the parent applications.

Date: 20 May 1998

  
\_\_\_\_\_  
Glen Erikson,  
Vice President, Lorne Park Research Inc.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yuan Min Wu and Eileen Xiao-Feng Nie

For: SOLUTION HYBRIDIZATION OF NUCLEIC ACIDS WITH ANTISENSE PROBES  
HAVING MODIFIED BACKBONES

The specification of which is attached hereto.

STATEMENT ESTABLISHING PROPRIETARY INTEREST BY PERSON  
SIGNING ON BEHALF OF NONSIGNING INVENTORS

RECEIVED

JUN 24 1998

OFFICE OF PETITIONS  
DEPUTY AGENT

I. I, Glen Erikson, of Suite 2018, 20 Queen Street West, Toronto, M5H 3R3 Canada, am the person signing the declaration of the above-identified application on behalf of the nonsigning inventors and make this statement as to the facts establishing my proprietary interest.

II. As of the date I signed the declaration for this application, the proprietary interest in this invention belonged to the following juristic person:

Lorne Park Research Inc.

and I am authorized to sign the statement on behalf of the juristic person, my title being Vice President.

III. I establish the proprietary interest by attaching the following items:

- (a) a copy of the employment agreements whereby the nonsigning inventors agreed to assign to Genetic Diagnostics Inc. all of their rights in inventions and patent applications resulting from their employment by Genetic Diagnostics Inc.; and
- (b) a copy of the Notice of Recordation from the United States Patent and Trademark Office showing that Genetic Diagnostics Inc. now does business under the name Lorne Park Research Inc.

I have firsthand knowledge that the invention described and claimed in the subject application was made by Yuan Min Wu and Eileen Xiao-Feng Nie while employed by Lorne Park Research Inc. The experiments which served as the basis for the invention were conducted by Drs. Wu and Nie in a laboratory leased by Lorne Park Research Inc., using supplies and instruments purchased by Lorne Park Research Inc. The experiments occurred while Drs. Wu and Nie were employed by Lorne Park Research Inc. for the purpose of conducting such experiments and developing patentable and/or proprietary subject matter to be assigned to Lorne Park Research Inc. The experiments were suggested and/or authorized by me on behalf of Lorne Park

# COULD YOU BE A FIGHTER?

Date: 20 May 1998

(Statement Establishing Proprietary Interest by Person Signing on Behalf of Nonsigning Inventor—page 2 of 2)

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN

Docket Number (Optional):  
E1047/20006

Applicant or Patentee: Xuan Min Wu and Eileen Xiao-Feng Nie

Serial or Patent No.: \_\_\_\_\_

Filed or Issued: \_\_\_\_\_

Title: SOLUTION HYBRIDIZATION OF NUCLEIC ACIDS WITH ANTISENSE PROBES HAVING  
MODIFIED BACKBONES

I hereby declare that I am

- ☐ the owner of the small business concern identified below  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Lorne Park Research, Inc.

ADDRESS OF SMALL BUSINESS CONCERN Box 101, Suite 2018, 20 Queen Street West  
Toronto, Ontario  
Canada M5H 3R3

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☒ the specification filed herewith with title as listed above.  
☐ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention must file separate verified statements averring to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization having any rights in the invention is listed below:

- ☒ no such person, concern, or organization exists.  
☐ each such person, concern or organization is listed below.

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Glen Erikson

TITLE OF PERSON IF OTHER THAN OWNER Vice President

ADDRESS OF PERSON SIGNING Box 101, Suite 2018, 20 Queen Street West  
Toronto, Ontario, Canada M5H 3R3

SIGNATURE Glen Erikson

DATE 20 May 1998

(2-92)

Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE